

## **EDUCATION ACTIVITIES OF THE WETLANDS RECOVERY PROJECT**

### **Public Advisory Committee Report to the Governing Board of the Southern California Wetlands Recovery Project October 2002**

At the Wetland Recovery Project's (WRP's) first annual symposium at SeaWorld in October 2000, participants expressed a strong consensus that wetlands and watershed education were fundamental to the WRP's purposes. The Governing Board, in a follow-on discussion of goals, affirmed the commitment to wetlands and watershed education. Board members emphasized that to serve the WRP, educational activities should be site-specific and experiential: "not just a flyer in an office waiting room." The WRP Regional Strategy adopted in 2001 sets out six goals, including one to *promote education and compatible access related to coastal wetlands and watersheds*.

The WRP addresses wetlands and watershed education through a number of different avenues: (1) Restoration projects; (2) the Small Grants program; (3) Public Advisory Committee materials and programs; (4) the Symposium; (5) the Information Station; (6) Task Force activities including education working groups of the Task Forces; and (7) the Proposition 13 grant to Environment Now. This report provides an overview of the WRP's wetlands and watershed education activities. The body of the report describes each of the eight sets of activities. The report concludes with a few thoughts about possible future directions for the WRP's wetlands and watershed education work. A presentation at the October 17, 2002 Governing Board Meeting will specifically address the following:

- Activities of the Los Angeles Task Force, particularly its recent award of a \$35,000 grant, to collect watershed educational materials region-wide for the CREEC web site which will be linked to the WRP web site.
- A joint Ventura-Santa Barbara Task Force effort to establish a Summit to Sea Program, and the outside resources for staff that this effort has attracted.
- The joint WRP-CalPIRG WaterWatch activities, especially the new Cal-State University programs, funded under the Proposition 13 grant to Environment Now.

1. **RESTORATION PROJECTS.** The primary purpose of the WRP's restoration efforts are to improve the ecological functions at a particular site and to increase habitat values throughout the region, but restoration projects promote education indirectly.

***Signage and Access.*** When requested, the WRP will include some costs for interpretive signs and for appropriate paths into covered project costs.

***Applied Restoration Techniques.*** At their best, restoration projects incorporate an experimental design. Restoration projects at the Model Marsh at Tijuana Estuary (San

Diego State University), San Joaquin Marsh (UCI), and Devereux Slough (UCSB) are associated with university programs. They involve professors and students in applied research related to restoration science—i.e., the restoration itself is designed as an experiment to compare the effectiveness of different techniques, which then informs later restoration plans.

Restoration projects also promote education *indirectly* by providing opportunities for the following:

***Publicity.*** Completed projects generate media events and focus attention on the benefits and values associated with these projects.

***Field Courses—Sciences, Arts & Humanities.*** Wetland sites serve as living laboratories for students in courses such as conservation biology, ethnobotany, landscape painting, nature poetry, environmental ethics.

***Field Research.*** Wetland sites offer researchers an opportunity to test hypotheses related to wetlands ecology, species behavior, and physical processes, impact of wetlands on water quality, and the role of marsh photosynthesis and carbon dioxide exchange in moderating global climate.

***Formal and Informal Education Programs.*** Restoration sites with interpretive centers typically have active programs involving school children, families, and others in site tours and related activities. Restoration sites lacking interpretive centers often have regular tours, lectures, and programs for the public sponsored by organizations such as Audubon, the Sierra Club, or a local community organization.

2. **SMALL GRANTS PROGRAM.** This two-year-old program was created to encourage local organizations to take on community restoration projects, thereby building their organization capacity and broader community investment in restoration. Promoting wetlands and watershed education is an explicit criterion for assessing proposed projects. The program has a simplified application process, awarding a total of \$200,000 annually in grants under \$30,000. It averages about ten projects per year, and about three-fourths have a grant-funded education components. Examples of education tools and activities funded by the Small Grants Program include:

- Interpretive Kiosks, Displays, Access.
- Publications and Outreach Materials.
- Landowner Education.
- Outreach to Underrepresented Communities.
- Hands-On Community Restoration Activities. These activities represent the bulk of the small grants and involve young people and lay people in learning about ecological principles, watershed functions, native and non-native plants, water quality, and restoration through “hands-on” work over a period of time.

3. **PUBLIC ADVISORY COMMITTEE.** The PAC's central focus is to inform legislators and policy makers about the Wetlands Recovery Project and the values of the resources the WRP is working to restore. The PAC creates materials and sponsors activities for its members and others to promote the WRP and its mission (e.g., brochures, pretty books, leg kits, PowerPoint and other presentations, videos, Sacramento and D.C. events; the Spring 2002 Sacramento event centered on the educational value of coastal Southern California's beaches and wetlands).

4. **SYMPOSIUM.** The symposium is designed to bring all of the entities of the Wetlands Recovery Project together to reflect on what has been accomplished and learned about restoring wetlands in coastal Southern California. Its dominant themes relate to the science of restoration. The sessions, however, are geared for policy makers, agency personnel, and community activists—not just scientists—and include discussions related to funding, education, policy, as well as new restoration research.

5. **INFORMATION STATION ([www.wrpinfo.scc.ca.gov](http://www.wrpinfo.scc.ca.gov)).** The Coastal Conservancy contracted with the University of California, Berkeley, to develop a web and map-based system for gathering information related to Southern California's coastal wetlands and watersheds. It is a place where young students to advanced researchers can go to find pertinent information. The Information Station includes:

- Library-on-Line
- Links to organizations
- Watershed and coastal wetland profiles
- WRP Project Information
- Novice, intermediate, and advanced GIS mapping capabilities that allow for zooming, queries, overlaying of GIS data bases, and tailored map-making and research.

The Proposition 13 grant allows for expanding the Information Station's library and adding more information related to watershed planning and restoration projects. HOWEVER, the Information Station will not fully realize its utility until agencies such as the regional Water Boards, the Army Corps of Engineers, the Coastal Commission and others post their documents and describe their projects and activities in GIS data bases that can be uploaded to the system. Then the Information Station, which is organized by watershed, can more fully depict the range of projects and activities occurring within each watershed.

6. **TASK FORCE ACTIVITIES.** The five task forces serve to educate those interested in rivers and streams in each county about the Wetlands Recovery Project and the opportunities for restoration in their area. They generally hold monthly meetings and their educational role relates to the following:

***Restoration Projects.*** Each task force elicits project proposals and then takes a first cut at ranking them—a very difficult, but educational experience. More recently, especially with the assistance of the watershed coordinators funded by the Proposition 13 grant, the task forces are beginning to be more pro-active in seeking out project proponents and helping them to develop sound project proposals.

**Information Clearinghouse.** The task forces also serve as a clearinghouse for wetlands and watershed information exchange. Watershed organizations and project sponsors speak about their planning efforts, study results, funding programs, and all learn from each other.

**Workshops.** The task forces, aided by the Coastal Conservancy, have begun to sponsor workshops related to restoration activities (e.g., a recent Santa Barbara/Ventura workshop addressed cost-effective methods of Arundo removal).

**Education Innovations by Members.** Individual task force members have begun to find new ways to focus their organizations on promoting wetlands education. For instance, the City of Ventura is directing over \$600,000 to develop and implement a master plan for public art enhancements for the 50-acre wastewater facility located between Ventura Harbor and the Santa Clara River Estuary. The wastewater facility uses wetlands to treat water, some of which is reused and some of which is discharged to the Santa Clara River Estuary. The project may include walkways, viewing platforms, benches, interpretive signage—all designed to promote environmental literacy and a greater appreciation of the habitat and the range or species living there. This project has been actively promoted by, Ventura City Councilman, Brian Brennan, a WRP Public Advisory Committee and Ventura County WRP Task Force member.

**Education Working Groups Of The Task Forces.** A number of task forces have created education working groups to better coordinate wetlands and watershed educational activities across their counties. Where this has occurred, it soon became clear that new faces were coming within the ambit of the WRP. They were eager to explore how they might begin to weave together a more integrated community of interest under the WRP umbrella.

- **Ventura/Santa Barbara Joint Education Committee**

The work agenda for the Ventura/Santa Barbara Joint Education Committee includes:

- Adapt the *Mountains to Sea* curriculum, initially developed by the Community Environmental Council for South Santa Barbara County, for application to Ventura County using several pilot classes. The pilot classes are underway.
- Create an evaluation framework for the pilot watershed education programs (to be completed by Jan 1, 2003) to show how the *Mountains to Sea* curriculum supports the schools' educational goals and responsibilities—i.e., that hands-on learning does not detract from performance on required math and reading tests. This will be key to broader use of the *Mountains to Sea* curriculum.
- Conduct a watershed education “needs assessment” for Ventura and Santa Barbara Counties that interviews potential key “producers” and consumers” of watershed education programs to determine where the different needs, interests, and opportunities come together.
- Examine potential sites, mission, exhibits, and funding opportunities for a Summit to the Sea Watershed Education Center in Ventura modeled loosely on the Santa Barbara

Watershed Center operated by the Community Environmental Council. The Ventura Center could serve as a hub, describing the wide range of wetland and watershed sites and educational opportunities throughout Ventura and Santa Barbara Counties.

- ***Los Angeles Education Working Group***

The Los Angeles Working Group began by each month scheduling different organizations to make presentations about their educational activities. It soon became apparent that Los Angeles has a wealth of creative, cutting-edge programs; that many were not aware of what the others were doing; and that group members found a lot of inspiration in each other's work. Key goals of the working group are to:

- Collect the existing watershed education materials in order to increase access by potential users and to highlight some of the best materials in different categories. TreePeople has been awarded a \$35,000 grant from a trust managed by the Center for Natural Lands Management to identify and enter information about watershed education materials throughout the region onto the CREEC website.
- Identify gaps and gluts as a means of guiding the future production of materials and to provide a rationale for funding.

The working group is now exploring several other possible activities, such as a "starter kit" for watershed organizations in our region; a collaborative educational activity with the Mexican American Opportunity Fund, and a joint activity with a water district.

- ***Orange County Education Activities***

Supervisor Tom Wilson chairs the Orange County Coastal Coalition, of which the WRP Task Force, which the Supervisor also co-chairs, is a subgroup. The Supervisor recently invited those involved in watershed education in Orange County to spend a day sharing information about their activities. The County followed up by hiring a watershed education coordinator in September 2002. The WRP will be exploring how it can usefully contribute to the watershed education activities in Orange County.

- ***San Diego Education Activities***

Several years ago in San Diego, a wetlands education working group, developed and produced a teacher education kit that had a colorful poster-sized map of San Diego's coastal wetlands and watersheds with a key describing their facilities, a glossary, a description of key species, hands-on exercises, etc. The committee was brought together and chaired by Joy Wolf, a Public Advisory Committee member and the Director of SeaWorld's Education Program. SeaWorld contributed considerable staff time as well as all production and duplication costs.

## **7. PROPOSITION 13 GRANT TO ENVIRONMENT NOW.**

### ***Southern California Wetlands Recovery Project Community Calendar***

([www.waterwatchonline.org/events](http://www.waterwatchonline.org/events)). Many people throughout the region are eager to participate in wetlands educational activities ranging from giving presentations and tours to on-the-ground work. With Proposition 13 grant funds, the California Public Interest Research Group (CalPIRG) has created a regional calendar of events, organized by county. Anyone with a password can enter information about their events onto the calendar, which are automatically deleted after the date has passed. Task force members will be given the password and encouraged to enter their events. The site will be linked to the WRP web site. Then the key question will be how to promote the calendar to the public.

***WaterWatch: Elementary Education, Habitat Restoration & Clean-Ups.*** Proposition 13 funds provide for a partnership between the WRP task forces and CalPIRG's WaterWatch Program, which mobilizes college students to participate in waterway improvement projects. The Proposition 13 is funding expansion of the WaterWatch program to the CalState campuses at Fullerton, Long Beach, San Diego, and possibly Channel Islands. CalPIRG recently received a grant from the US EPA, that complements and intensifies the Proposition 13 grant work. WaterWatch is doing the following:

- Training and providing speakers for 60 in-class elementary school presentations on wetlands and watershed issues and evaluating the results;
- Recruiting volunteers for 200 hours of on-site restoration and monitoring activities sponsored by task force member organizations;
- Organizing eight waterway clean-ups, including both educational and trash inventory components;
- Actively pursuing media coverage for these events and seeking to establish closer working relationships with the Conservation Corps and other organizations that offer programs to underserved youth.

***Watershed Coordinators Program.*** The Proposition 13 grant funds a full-time watershed coordinator for each of the five coastal counties. They are staffing the task forces, pulling together data for the Information Station, and serving as educators and ombudsman for organizations that want to learn how to develop watershed plans or restoration projects.